

Number:580-CK-029-01Approved By: (signature)Effective Date:July 25, 2005Name: Joe HennessyExpiration Date:July 25, 2009Title: Chief, ISD

Responsible Office: 580/Information Systems Division (ISD)

Asset Type: Checklist

Title: ISD Functional Configuration Audit Checklist

PAL Number: 3.1.1.3

**Purpose** This checklist is to be used when conducting a Functional Configuration

Audit (FCA). An FCA verifies that a delivered (or just "deliverable") product performs its intended function(s). This audit is generally performed prior to

formal delivery of a product.

**Scope** This checklist is to be used for all ISD mission software projects.

Roles and Responsibilities

**Product Development Lead (PDL):** 

Responsible for ensuring that the FCA audit is conducted properly. Also responsible for ensuring that all action items from this audit are tracked to closure.

**Independent Auditor:** 

Responsible for conducting the FCA.

NOTE: It is important that someone independent of the software system being audited (e.g., a qualified product stakeholder, or an auditor

assigned by Code 580) conduct the FCA.

References

LaRC Software Engineering Process Guidebook – Software Configuration

Management

MIL-STD-1521B (USAF), "Military Standard: Technical Reviews and Audits

for Systems, Equipments, and Computer Software"

**Change History** 

Version	Date	Description of Improvements
1.0	7/25/05	Initial version approved by CCB

ISD Functional Configuration Audit Checklist

Date(s) of Audit:	_ Project: _		
Independent Auditor(s):	· · · · · · · · · · · · · · · · · · ·	Name and number of CI/Release examined:	
	· <del></del>		

Item No.	Audit Question		Findings and Observations	Comments
	FCA PRIMAR	Y OBJ	ECTIVE	
1	Has the FCA verified that the configuration item has achieved the requirements specified in its functional baseline documentation and identified /recorded any discrepancies?			
	FCA AC	TIVITIE	S	
2	Have the following artifacts been made available for review prior to the FCA:			
2a	System/Software Requirements Specification?			
2b	Any deviations or waivers to the requirements?			
2c	System/Software qualification test documents submitted and approved?			
2c1	Test procedures?			
2c2	Test results?			
2c3	<ul> <li>Requirements traceability matrix (RTM)?</li> </ul>			
2d	The accepted system and component source code?			
2e	Software Change Requests (SCRs) that were implemented into the system and component source code?  • Number of DR's reported during			
	<ul><li>testing</li><li>Number of DR's resolved with and without SCR's</li></ul>			
2f	Software Version Description Document and Release Letter?			

2

July 25, 2005

Item No.	Audit Question	Yes, No, N/A	Findings and Observations	Comments
2g	System/Software Users Manual/Guide?			
3	Has analysis or simulation been accomplished for the performance parameters that couldn't be completely verified during testing?			
4	If the analysis or simulations were performed, were the results sufficient to ensure that the performance of the configuration item is compliant with the specification?			
5	Is there evidence that all system/software requirements can be traced to the design, source code, test procedures, and test results?			
6	Was system/software testing completed?			
7	Were all requirements verified?			
8	For those requirements that have not been verified or failed verification, has additional software and system testing been scheduled (including regression testing)?			
9	Has a Test Readiness Review (TRR) been conducted?			
10	How many action items from the TRR remain open? Is a plan in place to close them?			
	FCA COMPLET	TION C	RITERIA	
11	Were all FCA checklist items found to be acceptable?			
12	Were all FCA discrepancies recorded and addressed during the audit debriefing?			
13	Were there any FCA findings that remain open at the conclusion of this process? If so, have plans been made to verify the corrective actions at a later date?			
14	Has all associated documentation been placed under CM control in accordance with the CM Plan?			

	FCA POST AUDIT ACTIVITIES			
15	Did all designated stakeholders concur in the acceptability of the FCA?			
16	Were there any Lessons Learned documented at the completion of this process?			
			•	

Check one:	
☐ Results reviewed satisfy the requirements and are accepted (see attached comments).	
☐ Results reviewed do not satisfy requirements (see attached comments and list of deficiencies).	
Approved by:	Date:

Date	(s) of Audit:	Project:		
ndep	pendent Auditor(s):	Name and number of CI/Release examined:		
COM	MENTS PAGE of			
#	Comments from assessment	:		

5

July 25, 2005